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JUDUL: COMMUNICATION SKILLS: WHAT DO EMPLOYERS' EXPECT?
(WORKPLACE COMMUNICATION SKILLS FOR ENGINEERING GRADUATES)

SESI PENGAJIAN : 2002 / 2003

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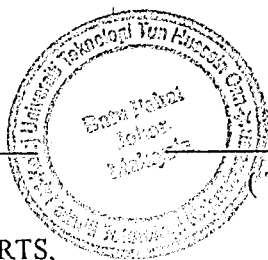
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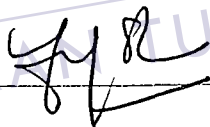
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COMMUNICATION SKILLS: WHAT DO EMPLOYERS' EXPECT?
(WORKPLACE COMMUNICATION SKILLS FOR ENGINEERING GRADUATES)

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Laporan projek ini dikemukakan sebagai memenuhi sebahagian daripada syarat
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Jabatan Pendidikan Teknik Dan Vokasional
Kolej Universiti Teknologi Tun Hussein Onn

SEPTEMBER 2002

“Saya akui ini adalah hasil kerja saya sendiri kecuali nukilan dan ringkasan yang setiap satunya telah saya jelaskan sumbernya”.

Tandatangan



Nama Penulis

LALITHAMBIGAI A/P SIVANGANAM

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ॐ

My Family, My Soul Mate, My Guru

I Lay Before You The Fruits Of Your Love, Blessing And Guidance.

Om Sai Ram



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ABSTRACT

A brilliant engineer who cannot communicate is a matter to be taken seriously. What will happen to Malaysia if we keep churning out thousands of brilliant engineers but when it comes to employability skills, they are retarded? Malaysian engineering graduates especially are handicapped when it comes to communicating in English. English language is the international language used for education, business and technology. Therefore, it is crucial that an engineer masters the art of communicating in English as well as engineering knowledge. Thus, this research is conducted to find out what communication skills that the employers in the industry deem that their employees should have? However, this research only focuses on engineering graduates and the manufacturing industry. The researcher intends to learn the importance that is given to communication skills by the industry and whether it helps an engineering graduate to be promoted and be successful in their jobs. After obtaining the results from the employers, the researcher will suggest recommendation to improve the course content of KUiTTHO's Communication Skills course to be parallel with the demands of the industry.

ABSTRAK

Harapan Malaysia adalah untuk mencapai taraf negara maju menjelang tahun 2020. Antara profesion utama yang menyumbang ke arah pembangunan negara adalah profesion kejuruteraan. Terdapat pelbagai insitusi yang mencernakan jurutera yang arif dan bijak dalam bidang kejuruteraan masing-masing. Akan tetapi, kuantiti jurutera yang keluar tidak mempunyai kemahiran yang cukup untuk menangani situasi alam pekerjaan. Antara kemahiran yang penting yang diperlukan oleh seorang jurutera adalah kemahiran untuk berkomunikasi menggunakan bahasa antarabangsa, iaitu Bahasa Inggeris. Keupayaan untuk berkomunikasi dalam bahasa Inggeris dianggap penting kerana semua maklumat, ilmu dan transaksi perniagaan dilakukan menggunakan Bahasa Inggeris. Ramai graduan kejuruteraan tempatan yang lulus dengan cemerlang gagal memperolehi pekerjaan yang baik dan tidak mempunyai persembahan sosial yang cemerlang di pejabat. Masalah utama mereka adalah penguasaan Bahasa Inggeris dan taktik komunikasi yang lemah dan tidak teratur. Oleh itu, kajian yang dijalankan oleh penyelidik adalah berkenaan dengan kemahiran berkomunikasi di tempat kerja bagi graduan kejuruteraan. Penyelidik akan menyelidik majikan – majikan daripada syarikat pembuatan yang besar dan mengetahui kehendak mereka dalam kemahiran berkomunikasi yang harus di kuasai oleh seorang jurutera. Seterusnya, penyelidik akan memberikan cadangan baru berdasarkan hasil penyelidikan untuk memperbaharui rangka kursus Kemahiran Berkomunikasi di KUiTTHO.

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CHAPTER 1

PREFACE

1.0 Background

Judith Dwyer (1997) defined communications as any behavior, verbal or non-verbal, that is perceived by another. Knowledge, feelings or thoughts are encoded and sent from at least one person and received and decoded by another. Meaning is given to this message as the receiver interprets the message. A connection is made between people communicating. Thus, the definition of communication can be meant as, Cielens Marty (1999) says communication is the means by which people share words, ideas and feelings. Sharing ideas helps people to relate to each other more effectively, to work together more happily and to get jobs done faster.

Communication within the workplace occurs for a number of direct and indirect reasons. As defined above communication is a direct way of passing message to another person. Leaders for evaluating performance, directing or instructing staff and motivating others, also use an indirect way of communication.

People working as part of a team or department with an effective communicator as its leader are generally more confident and competent because they understand what they are doing and what is required from them. They are able to work together in a purposeful, supportive and flexible manner.

Firms or businesses that aim to provide a product or service to others must interact and operate with other people. This interaction with clients, customers, staffs and members of other organization requires communication and will succeed where the communication is effective. Observing these people who are good in their relationships at work with other answers that these people actually have the means, the capacity and will to communicate. Communication theory provides the means; their motivation provides the willingness and their skills in communication presents the capacity.

Good communication skills depend first but not entirely on language. In the professional world of English speaking modern world, a mastery of English is essential both to advancement of individual career and to the fulfillment of professional duties. However the mastery of English as a linguistic option brings out a flawless writer or speaker but not necessarily a good communicator. The mastery of communication skills can actually compensate the lack of language fluency.

Communication skills is given a lot of preference in employments as most employers want their employees' to have more than a good academic records because academic excellence would not secure a hundred million contract but good communication skills can actually help the client to trust the companies. In order to do so, the Malaysian government in an understanding with the London Chambers of Commerce and Industry Examination Board has an English Language Skills Assessment (ELSA). ELSA is an assessment that is conducted by employers' for their staffs or employees to check level of proficiency in English for the purpose of effective job function and career advancements. The four language skills that are assessed are speaking, writing, listening and reading.

In a statement from an article titled “ State Of The World Industry And Outlook For The Post 2000” by Mayer (2000) it has been said that the developing countries in global manufacturing value added will reach 25% by the year 2000 and suggests that a 30% share is attainable by 2005, when their, the developing countries share could have risen to beyond 35%. Therefore by the year 2015 advanced developing countries will be marching into the ranks of developed economics and narrows the “GDP per capita gap” between developed and developing countries.

This statement predicts an avalanche of employment prospects for Malaysians, as Malaysia is an advanced developing country. In realization with this, the Malaysian government has allocated RM10.7 billion for the education sector through it's 8th Malaysia Plan because the country needs a competent workforce especially in the engineering education as manufacturing industries needs abundance of technical and vocational workforce.

So, engineering will be a profession with tremendous employment possibilities. Therefore to produce world class engineers Malaysian universities and professional engineering bodies need to implement communication skills into the curriculum while maintaining the fundamental knowledge of engineering processes so that the graduates are not only competent in terms of job specific but also can think creatively, analytically, good communicators, good team workers and adaptable life long learners.

As Ove Arup said in his famous engineering quotation;

*Engineering problems are under defined,
There are many solutions, good, bad and indifferent,
The art is to arrive at a good solution,
This is a creative activity, involving imagination,
Intuition and deliberated choice.*

1.1 Problem

Johor Menteri Besar, Abdul Ghani Othman (Business Times, 15/11/1995) stated, “Malaysia needs a versatile workforce proficient in English because of the pragmatic purposes that the language can serve. English, as an international language is important in Malaysia’s plan for modernization.”

M.Osman (News Straits Times, 17/11/1995) states, “When we talk about communication technology, what comes to my mind is the ability to communicate in a language understood internationally like English. There is no doubt that English is one of the most important languages and those who are not able to communicate well in it will have some problem. This because English is the main medium of instruction and dominates the world technology”

The conclusion of these two statements is that English is the main medium of communication internationally in all fields. The only way for Malaysian to be able to penetrate into the international market is to have a workforce, which has good communication skills in English along with sound qualifications.

With the aim of helping Malaysian graduates especially, engineering graduates because engineers are known for their intellectual ability and communication disability. Therefore in accordance with Ir. Rocky Wong Hon Thang, Managing Director of JS Mahir Sdn. Bhd speech entitled Beginning of an Engineering Profession, “one of the requisites of engineers of the next millennium will be to develop and master interpersonal skills, the ability to project ideas across and equip themselves with integrity, creativity and innovative thinking in order to carry out their work more efficiently”

In fact Bellingger (2000), comments that the 1999 salary survey suggests that the engineers of today have to be able to communicate, he or she has to speak well,

write forcefully and nail business skills early in life if the individual wants to advance. Therefore the researcher strongly feels that having communication skills to an engineer is essential as their engineering knowledge. They cannot advance without either one.

After reviewing the course content framework of Communication Skills that is being used in Kolej Universiti Tun Hussein Onn, the researcher finds that all students of the Engineering Faculty is and are being taught the same content.

The research will be conducted to evaluate the effectiveness of the communication skill course that is being taught in Kolej Universiti Teknologi Tun Hussein Onn by making a survey of employers in the engineering field. The results of the employer's survey will be used as a basis to suggest recommendations to upgrade the current Communication Skills course content.



1.2 Statement of the Problem

Is KUiTTHO's Communication Skills course content really producing workforce, which is the graduates of the Engineering and Engineering Technology Faculty that meet the employer's expectation and demand of communication skills.

1.3 Research Questions

- 1.3.1 What are the expectations of the employer on the communication skills of the engineering graduates?
- 1.3.2 Does this syllabus of communication skills meet the employer's expectation?
- 1.3.3 What can be done to improve the communication skill course in KUiTTTHO?
- 1.3.4 Does the Communication and Language Department of KUiTTTHO need to revise their Communication Skills course content to produce more industry friendly engineers?

1.4 Purpose of the Study

The purpose of this study is to determine whether KUiTTTHO's Communication Skills course content has been able to produce, workforce that meet the current demand of communication skills. Specifically, this study intends to:

- 1.4.1 Understand the employer's expectation on the communication skills of the engineering graduates in general.
- 1.4.2 To make a suggestion to review the communication skills curriculum to meet employer's expectations

1.5 Objectives

- 1.5.1 The researcher intends to determine what is the employer's expectation on engineering graduates communication skills.
- 1.5.2 The researcher intends to find out what is the whether KUiTTHO is providing sufficient training in communication skills to equip engineering graduates in the work place by making comparison of the current Communication Skills course content and the employers' expectation.
- 1.5.3 The researcher intends to find out whether there is a relationship between the level of communication skills and career advancement.

1.6 Importance of Studies

The mere mention of presenting in English can make a student breakout in cold sweat. To imagine that they are going to converse and write in English when they work is the greatest nightmare of our Malaysian graduates. Why do our students have this fear for a language that actually has international acclamation and usage? This question needs to be answered! Our students' capability in their work is no doubt implacable but when it comes to conversing and writing in English our students are brain dead or they stutter like a child learning to talk.

Thus, lay the importance of this study. This study is going to shed some light on a matter that is crucial to students that is to increase the standard of communicating in English among students. This study is also going to take the employer's point of view on what is necessary for a student to know when he or she comes to work.

The result of this study will be a guideline that will be used by employer's as well as respective higher learning institutions to fit their curriculum so that the demands of the work market is met and at the same time the standard of English among our graduates increases.

1.7 Scope of Study

The researcher will only focus on employers' in the industry. The researcher would emphasis here that the industry defined here are large manufacturing corporation. This is because these companies employ thousands of employees from various backgrounds with engineering graduates included.

Therefore, the importance for workplace communication skills will be included in this research. The researcher will also research the communication skills that are expected of engineering graduates by the employers. The research will find out whether good command of communication skills will increase the employability of engineering graduates as well be plus point in promotions and job success. Finally, the researcher will give recommendations for a new Communication Skills course content to the Communication and Language Department of KUiTTHO.

1.8 Limitation

The major limitation that will be faced by the researcher is that the research will only deal with employers from the industry and therefore the perception of students

who have graduated or that are still in university is not taken into account. Since communication skills is a wide topic only verbal communication and interpersonal skills necessary in workplace situation will be accounted for in this study.

1.9 Assumption

The researcher assumes that the questionnaire distributed will be answered with honesty. As a result the data that will be collected will assumed correct and true in describing the scenario

1.10 Definition

“Communication is any behavior, verbal or nonverbal, that is perceived by another. Knowledge, feelings or thoughts are encoded and sent from at least one person and received and decoded by another. Meaning is given to this message as the receiver interprets the message. A connection is made between the people communicating” (Judith Dwyer, 1997).

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Our word “engineer” can be traced back to the Latin word *ingenium*, meaning cleverness, or natural ability (John Davies, 1996). The main business of professional engineers is to be ingenious; to come up with good ideas and to make them work in practice. No engineer works in complete isolation; there is no point in having a good idea if you are unable to communicate it. Poor communication can create ambiguity even cause disasters. At the very least, it gives a bad impression. If people think you communicate badly, they will not trust you as an engineer. These people could be your prospective employers, bosses, colleagues, clients, the public or the media. There is a great deal at stake. Your career as an engineer, the quality of achievements, the benefit to the society of engineering projects in general, the status and the reputation of the whole profession, all these things depends on good communication skills.

Yet, graduate engineers are notoriously poor at communicating. Some engineers’ maybe an exception, but employers widely believe that there is a problem.

They also feel that things are getting worse. As young engineers no matter how good, they are in their field but if there are no good communication skills, then the future is bleak.

Why do graduate engineers tend to be poor at communicating? Engineering courses are usually very concentrated because there is plenty to learn. There will probably be communication classes within your course, but time constraints are such that compared to technical subjects communication is not significant. When engineers write or speak they should have something specific, factual and precise, to say. It should be possible to separate what is being communicated from how is being communicated.

A characteristic of communication by engineers is that words are by no means the only medium. Numbers, tables, mathematical expression, graphs, diagrams and drawings can all enhance communication.

One of the goals in every country is to prepare young people to participate in paid work, as employees or self-employed. Employers faced enormous changes in a highly competitive global marketplace because the new economy demanded new ways of thinking, new ways of managing and new ways of working. As the nature and look of jobs changed, the level of education and skills also changed. Many educators faced the challenge of preparing young people to participate in the increasingly complex and changing world of work by calling on employers to articulate and communicate their needs better

Concurrently and perhaps in part in response to this workplace requirement, universities perceive effective communication skills as one of the generic skills, which "should represent the central achievements of higher education as a process. Bellingger (2000), comments that the 1999 salary survey suggests that the engineers of today have to be able to communicate, he or she has to speak well, write forcefully and nail business skills early in life if the individual wants to advance.

The concern with engineering graduates communication skills is not limited to Malaysia. A survey of employers in New Jersey in the United States reported that communication is one of the skills perceived by employers as vital and for which graduates lack preparation. The recent DEETYA (Australia) report on research undertaken into employer satisfaction with graduate skills supports this in listing oral communication third out of the seven skills sought in new graduates new graduate students. In Canada, when the Conference Board of Canada's Corporate Council on Education published "Employability Skills Profile" 25 of Canada's major employer's stated that employer's in Canada are looking for "people who can communicate, think, continue to learn throughout their lives, demonstrate positive attitudes and behaviors, responsibility and adaptability when working with others.

2.1 What Is Communication?

Communication is any behavior, verbal or nonverbal, that is perceived by another. Knowledge, feelings or thoughts are encoded and sent from at least one person and received and decoded by another. Meaning is given to this message as the receiver interprets the message. A connection is made between the people communicating (Judith Dwyer, 1997).

Each channels of communication requires effective skills suited to the form of communication used to send the message. The three forms of communication is classified as *verbal communication (spoken and written)*, *nonverbal and graphic*. Communication skills are communication that is sent by any means other than words or graphics.

Verbal communication can take the form of spoken words between two or more people, or written words in written communication. *Non-verbal communication* is communication sent by any means other than words or graphics. Non-verbal components exist in oral, written and graphic communication. Facial expression, body movement, posture and dress are some non-verbal components of written and graphic communication. *Graphic communication* represents ideas, relationship or connections visually with shapes diagrams and lines. Graphic communication can have both verbal and non-verbal components (Judith Dwyer, 1997).

2.2 Types Of Communication

A person working in an organization uses four types of communication, which is intrapersonal communication, interpersonal communication, group and team communication, presentational communication and mediated communication (Gay Lumsden/ Donald Lumsden, 1995).

2.2.1 Intrapersonal Communication

Intrapersonal communication is communication within the individual, through the process of thinking and feeling. It enables you to communicate with yourself. This style of communication creates a person's self concept and processes information. (Judith Dwyer, 1997)

2.2.2 Interpersonal Communication

Interpersonal Communication is interaction between people, on a one to one basis or in small groups. In this style of communication, you communicate with at least one other person. E.g. staff briefings, feedback and messages. (Judith Dwyer, 1997)

2.2.3 Group and Team Communication

This form of communication involves socializing and or working with a small number of others to achieve a specific goal. In this type of communication, an individual deals with both interpersonal and intrapersonal skills. (Gay Lumsden/ Donald Lumsden, 1995).

2.2.4 Presentational Communication

This communication happens when a person addresses a small group of people or an auditorium full of people. Presentational communication happens by applying the interpersonal and an intrapersonal communication skill, which is to organize, plan and rehearse her communication effectively. (Gay Lumsden/ Donald Lumsden, 1995).

2.2.5 Mediated Communication

Mediated communication is communication channeled through a written or electronic medium such as newspapers, magazines, telephones, radio and television. As we watch the media, we receive the message through our self (interpersonally), with others (interpersonally) or in groups. (Gay Lumsden/ Donald Lumsden, 1995).

2.3 How Communication Works

The components of communication are *people, messages, codes, channel, feedback, encoding and decoding, and noise*. People are involved in the human communication process in two roles. A source initiates a message, and a receiver is the intended target of the message.

Individuals do not perform these two roles independently. Instead, they are the sources and the receivers of messages simultaneously and continually. People do not respond uniformly to all messages, nor do they always provide the same messages in the exactly same way they send and receive messages.

The meaning of message here is in the verbal and non-verbal form of the idea, thought and feeling that one person wishes to communicate to another person or a group of people meanwhile the channel is the means by which the message moves from the source to the receiver of message. Feedback is the receiver's verbal or non-verbal response to the source's message. (Judith Dwyer, 1997)

Communication barriers occur because of a misunderstanding or misinterpretation of the message. The sender, the receiver, lack of feedback, a poor choice of channel, the wrong context or any other elements in the communication model can cause these barriers. Effective communication often passes unnoticed, while poor communication is obvious therefore recognizing these barriers is an important step towards avoiding them.

There are many strategies in avoiding miscommunication such as listening carefully, speaking clearly, giving feedback, planning and structuring the message before sending it out.

2.4 Communication At The Workplace

The central role of communication in the workplace seems obvious when considering the nature of human society and the integral role of language. Communication is the sharing of meaning and social interaction, including talk, is a means for achieving occupational activity. Furthermore, the importance of workplace communication seems to be increasing not only in information and in service-based industries, which rely on effective communication, but also generally in today's business world.

New technology in the form of computers and robots is completing more and more mundane tasks, releasing employees for greater involvement in workplace issues such as quality and innovation. These depend heavily on the ability to speak and listen well, as do conflict resolution and the provision of meaningful feedback, and all of these underpin improvement in work practices and products. As well as this, communication skills is vital to contemporary industrial relations, where the shift is towards employees negotiating with their employers their work conditions and pay.

Moreover, in these times of economic instability and productivity maintenance and competitive environment, listening and speaking skills are vital tools in developing employee's ability to learn and consequently to acquire new skills. Communication also promotes co-operative interaction among individuals, work group members, and the community. Despite its fundamental nature, it is important to be aware that communication skills is not a simple process of sender / message / receiver. Rather, it is complex and context dependent and thus not universal in that there is no single mode of communication suitable for all circumstances. Communication is embedded in its particular discourse community where in presenting particular values, results in different meaning for different audiences in differing contexts.

In the business context, a multinational organization's internal and external environment shapes the community and its values, and therefore influences the forms of communication suitable for that organization. At a structural level, it is crucial that an employee of a multinational company to know the nature of the organizations, their reasons for existence and how individual actions affect the structure and strategic objectives of the organization. This is important because there are graduates who really realize the impact of bad communication on the organization's image and their position in the organization.

Successful communication is embedded in awareness of the social and political forces, which influences multinational organizational decision-makers, the audience for the communication, and the process for any decision-making. Other important skills that are important for an employee is the ability to "navigate the complex social waters" of the organization, that is being able to communicate with top-level corporate figures and also with their own level of staffs. Therefore being a competent communicator in such organizational settings requires the employee to master the ways of speaking, reading and writing indigenous to the particular organizational culture.

2.4.1 Forms of Workplace Communication

Communication pervades business operations and takes many forms. However, this view needs to be conceptualized to the complexity of the process underpinning effective communication. The relationship of listening to speaking also needs to be emphasized because both are inextricably intertwined. The value of active listening in the workplace, which involves eyes as well as ears and takes account not only of the words spoken, but also the way they are spoken. That is, nonverbal clues and language features such as tone and emphasis reveal the message "between the lines" and should

receive attention. Therefore, employees should be equipped with the resources to comprehend organizational, social, and political and power structures to be better placed to communicate competently, thereby minimizing miscommunication and providing a means for success in job tasks and ultimately for career progression.

These views are supported by a United States study (Carol Ascher, 1988) of managers and their classifications of entry level needs and uses of employees. They list the most important aspects as communicating effectively with the public, meeting skills, presentation skills, handling customer complaints and conflict resolution skills. In the same study, teaching, instructing and interviewing were identified as least important for entry-level positions.

2.4.2 Oral Communication and Team Work

As well as the range of communication events relevant to the work of graduate business employees elaborated on in the previous section, employees need to be able to function in teams where groups of employees work together to achieve a common goal. Teamwork is a significant feature of contemporary organizations. Cross-functional teamwork and communication skills, amongst others, are also requirements in the total quality workplace.

Teamwork requires communication between team members. It is complicated by the need for employees to communicate across gender, generational, ethnic and social backgrounds, and is increasingly problematic when the teams are multidisciplinary. Carnavale explain that successful organizational interaction of individuals depends on effective interpersonal skills, focused negotiation and a sense of group purpose. Furthermore, as companies become less hierarchical and team work becomes more

common, more sophisticated communication skills will be demanded other than the ability to "give and take orders.

It is clear from the above discussion that developing appropriate and effective communication skill curriculum is a complex process. It is also clear that it is a much more elaborate process than merely learning to conduct meetings and making successful presentations. In order to survive and succeed in today's booming and competitive engineering business world it important to understand organizational environments, and develop a framework for effective communication skills along with critical thinking skills. Such ability from a graduate will be appreciated by the employers and also by the employee themselves as they have the ultimate ability to survive in any environment just as long they are able to communicate effectively.

2.5 Review of Kolej Universiti Teknologi Tun Hussein Onn's Communication Skill's Course Content

Communication development, as an aspect of university undergraduate studies, can occur in several ways. It may be integrated into subjects as a component of assessment. This may be through formal means such as students presenting formally, reporting on a project, or preparing and participating in debates. Informally, it can occur through students' participation in tutorial discussion. A disadvantage of such an approach is that there may be little or no teaching or training provided for the students. Most often students learn by watching other students. The acquisition of communication skills for graduates depends on the course content prepared by the individual higher learning institution. However, the effectiveness of any course content is also dependent on the activeness and the interest of the student.

In Kolej Universiti Teknologi Tun Hussein Onn, Communication Skills, BPP 3132 (Civil Engineering), UHP 3052 (Mechanical Engineering), UHP 3052 (Electrical Engineering) is a Communication Skills subject offered to students from the third year only. This is a 2-credit subject with three contact hours. The objective of this course is to provide exposure and practice in developing individual potential to interact for specific purposes and to make use of the written and spoken sources of information in interaction.

The contents of the subjects taught are the same to all three engineering faculties. The following table is the framework of the Communication Skills course content that is taught:

Main topics	Sub topics
Introduction to Communication	3 Definition of communication 4 Types of communication 5 Means of communication 6 Purpose of communication
Effective Communication	■ Select and Narrowing a topic 7 Selecting a purpose 8 Analyzing the audience
Communication Technology	9 Brochures 10 Power Point Documents 11 Advertisements
Negotiation Skills	
Interviews	

Table 1: Communication Skills Course Outline in KUiTTHO

This course content will be compared to the results of the employers survey (enclosed as Appendix A) to see whether the course content currently used is compatible to the industry. Further studies will be done to decide whether it is necessary for the course content to be revised, to increase the importance of the subject.

2.6 Conclusion

This literature review has presented a wide-ranging reflection on communication in the work place. It has covered the importance and integral nature of workplace communication, and the complexity of the process of communication in the workplace. The increasingly globalizes nature of company operations exacerbates this complexity. The forms that communication take in the workplace are correspondingly varied and complex, ranging from listening and following instructions to social conversation, networking and working co-operatively in teams. Wong Yat Fun (ITTHO, 2000) has stated in her research paper that communication skills is very a important skill and it must be acquired by all engineering graduates to enhance the future of their career as well as have a better job success.

The results from the employer's surveys presented in the next section of this report draw on this complexity. However, the focus is on the elements, which underpin this intricacy. Thus, the frequency and importance of workplace communication for engineering graduate employees is initially investigated. This is followed by exploration of the people with whom graduate employees communicate, and the forms that this communication takes that is, social conversation, work-related discussions and so on.

Future investigation on completion of this study would be to explore the range of backgrounds of personnel communicated with by graduate employees, the structural nature of organizations of varying activities and the resulting organizational communication patterns. A case study approach would be appropriate methodology for this type of research. However, it needs to be re-stated that information derived in this study underpins such further research.



CHAPTER 3

RESEARCH METHODOLOGY

3.0 Research Design

The research that will be carried out by the researcher is a qualitative research and is in the form of a survey. The descriptive statistics method will be used to simplify and organize the data into the form of percentage and graphical representation of the data. The survey form will be simplified to answer six research questions.

3.1 Sampling

The main respondent in this research is the employer. This is because the research will be conducted to determine the employer's expectation in an engineering graduate's communication skill. Since there are many large, medium and small

companies and corporations in the industry, preference will be given more towards large companies that are more engineering based. The rationale of choosing large engineering based companies is because the employers are the only person who knows what they need in their employees. Furthermore, companies which purely business based have different needs for their employees than the engineering based companies.

The large numbers of companies in the peninsular prompted the researcher to downsize the sample to 15 large companies, varying from the north to south of peninsular Malaysia. Therefore, the samples for this research will be 15 representatives from 15 large companies that will be randomly picked.

3.2 Instrumentation

The first step in the research was to obtain information from a review of the literature on workplace communication and graduate employees. Information was obtained concerning the forms of communication such employees would be likely to engage in, and the staff with whom they would be likely to communicate. The information derived was used as the basis for the surveys to be completed by the employers.

The surveys were constructed with questions requiring selection of ratings, and with some open-ended questions allowing for more information that is diverse. The rating questions required the respondents to select from a 5-point scale, with 5 being the highest level and 1 being the lowest.

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